

Daniel Chrastina

List of Publications by Year in descending order

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215
papers

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216
all docs

216
docs citations

216
times ranked

3283
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamics of Hole Singlet-Triplet Qubits with Large g -Factor Differences. Physical Review Letters, 2022, 128, 126803.	7.8	23
2	Design and simulation of waveguide-integrated Ge/SiGe quantum-confined Stark effect optical modulator based on adiabatic coupling with SiGe waveguide. AIP Advances, 2021, 11, .	1.3	4
3	Epitaxy and controlled oxidation of chromium ultrathin films on ferroelectric BaTiO3 templates. Journal of Crystal Growth, 2021, 558, 126012.	1.5	0
4	Telecom-wavelength InAs QDs with low fine structure splitting grown by droplet epitaxy on GaAs(111)A vicinal substrates. Applied Physics Letters, 2021, 118, .	3.3	12
5	A singlet-triplet hole spin qubit in planar Ge. Nature Materials, 2021, 20, 1106-1112.	27.5	73
6	Engineering of the spin on dopant process on silicon on insulator substrate. Nanotechnology, 2021, 32, 025303.	2.6	9
7	Second Harmonic Generation in Germanium Quantum Wells for Nonlinear Silicon Photonics. ACS Photonics, 2021, 8, 3573-3582.	6.6	13
8	Mid-infrared second harmonic generation with Ge quantum wells. , 2021, , .		0
9	Probing the in-plane electron spin polarization in Ge/ Si0.15Ge0.85 multiple quantum wells. Physical Review B, 2020, 101, .	3.2	4
10	Mid-infrared second harmonic generation in Ge/SiGe coupled quantum wells. , 2020, , .		1
11	Ge/SiGe parabolic quantum wells. Journal Physics D: Applied Physics, 2019, 52, 415105.	2.8	8
12	Raman spectroscopy of epitaxial InGaN/Si in the central composition range. Japanese Journal of Applied Physics, 2019, 58, SC1020.	1.5	2
13	Recent Progress on Ge/SiGe Quantum Well Optical Modulators, Detectors, and Emitters for Optical Interconnects. Photonics, 2019, 6, 24.	2.0	26
14	Vertical Ge ¹³³ Si Nanowires with Suspended Graphene Top Contacts as Dynamically Tunable Multispectral Photodetectors. ACS Photonics, 2019, 6, 735-742.	6.6	15
15	Effective g factor of 2D holes in strained Ge quantum wells. Journal of Applied Physics, 2018, 123, .	2.5	11
16	Ge-Rich Graded-Index SiGe Alloys: Exploring a Versatile Platform for mid-IR Photonics. , 2018, , .		0
17	Germanium-based integrated photonics from near- to mid-infrared applications. Nanophotonics, 2018, 7, 1781-1793.	6.0	128
18	High energy pulsed laser deposition of ohmic tungsten contacts on silicon at room temperature. Thin Solid Films, 2018, 666, 121-129.	1.8	2

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19	Droplet Controlled Growth Dynamics in Molecular Beam Epitaxy of Nitride Semiconductors. Scientific Reports, 2018, 8, 11278.	3.3	10
20	Mid-infrared sensing between 52 and 66 Åm wavelengths using Ge-rich SiGe waveguides [Invited]. Optical Materials Express, 2018, 8, 1305.	3.0	43
21	Universal Frequency Dependence of the Hopping AC Conductance in p-Ge/GeSi Structures in the Integer Quantum Hall Effect Regime. Journal of Experimental and Theoretical Physics, 2018, 126, 246-254.	0.9	0
22	Dislocation density and structure in Si _{1-x} Ge _x buffer layers deposited by LEPECVD. , 2018, , 247-250.		0
23	Ge-rich SiGe waveguides for mid-infrared photonics. Proceedings of SPIE, 2017, , .	0.8	1
24	Ge-rich graded-index Si _{1-x} Ge _x waveguides with broadband tight mode confinement and flat anomalous dispersion for nonlinear mid-infrared photonics. Optics Express, 2017, 25, 6561.	3.4	44
25	Electro-Refraction in Standard and Symmetrically Coupled Ge/SiGe Quantum Wells. Nanoscience and Nanotechnology Letters, 2017, 9, 1123-1127.	0.4	0
26	Strain in Si or Ge from the Edge Forces of Epitaxial Nanostructures. Nanoscience and Nanotechnology Letters, 2017, 9, 1128-1131.	0.4	0
27	Controlling the Electrical Properties of Undoped and Ta-Doped TiO ₂ Polycrystalline Films via Ultra-Fast Annealing Treatments. Advanced Electronic Materials, 2016, 2, 1500316.	5.1	19
28	Tensile strain in Ge membranes induced by SiGe nanostressors. Applied Physics Letters, 2016, 109, .	3.3	4
29	Lattice bending in three-dimensional Ge microcrystals studied by X-ray nanodiffraction and modelling. Journal of Applied Crystallography, 2016, 49, 976-986.	4.5	6
30	Top-down SiGe nanostructures on Ge membranes realized by e-beam lithography and wet etching. Microelectronic Engineering, 2016, 153, 88-91.	2.4	10
31	Electro-absorption and electro-refraction in Ge/SiGe coupled quantum wells. , 2016, , .		0
32	Anisotropic extended misfit dislocations in overcritical SiGe films by local substrate patterning. Nanotechnology, 2016, 27, 425301.	2.6	1
33	Silicon photonics based on Ge/SiGe quantum well structures. , 2016, , .		1
34	Broadband single mode SiGe graded waveguides with tight mode confinement for mid-infrared photonics. , 2016, , .		0
35	Expanding the Ge emission wavelength to 2.25 Åm with Si ₃ N ₄ strain engineering. Thin Solid Films, 2016, 602, 60-63.	1.8	3
36	Thermoelectric cross-plane properties on p- and n-Ge/Si _{1-x} Ge _x superlattices. Thin Solid Films, 2016, 602, 90-94.	1.8	4

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37	Vertical Germanium Nanowire Photodetectors with Suspended Graphene Top Contact. , 2016, , .		2
38	Giant electro-optic effect in Ge/SiGe coupled quantum wells. Scientific Reports, 2015, 5, 15398.	3.3	23
39	Local uniaxial tensile strain in germanium of up to 4% induced by SiGe epitaxial nanostructures. Applied Physics Letters, 2015, 107, .	3.3	18
40	Highly strained Ge on Si microdisks with silicon nitride stressors. , 2015, , .		0
41	Silicon photonics based on Ge/SiGe quantum well structures. , 2015, , .		0
42	Structural investigations of the $\pm 12\text{Si}^{100}\text{Ge}$ superstructure. Journal of Applied Crystallography, 2015, 48, 262-268.	4.5	3
43	Micro and nanofabrication of SiGe/Ge bridges and membranes by wet-anisotropic etching. Microelectronic Engineering, 2015, 141, 256-260.	2.4	7
44	Cu ₂ ZnSnSe ₄ device obtained by formate chemistry for metallic precursor layer fabrication. Solar Energy, 2015, 116, 287-292.	6.1	2
45	Tuning of Electrical and Optical Properties of Highly Conducting and Transparent Ta-Doped TiO ₂ Polycrystalline Films. Journal of Physical Chemistry C, 2015, 119, 6988-6997.	3.1	46
46	Extending the emission wavelength of Ge nanopillars to 225 $\frac{1}{4}$ μm using silicon nitride stressors. Optics Express, 2015, 23, 18193.	3.4	25
47	Optical Interconnects based on Ge/SiGe Multiple Quantum Well Structures. , 2015, , .		0
48	Emission Engineering in Germanium Nanoresonators. ACS Photonics, 2015, 2, 53-59.	6.6	27
49	Silicon Photonics Based on Ge/SiGe Quantum Well Structures. , 2015, , .		0
50	O-band quantum-confined Stark effect optical modulator from Ge/Si _{0.15} Ge _{0.85} quantum wells by well thickness tuning. Journal of Applied Physics, 2014, 116, .	2.5	17
51	Excess carrier lifetimes in Ge layers on Si. Applied Physics Letters, 2014, 104, .	3.3	62
52	(Invited) Photonic Interconnection Made by a Ge/SiGe MQW Modulator Connected to a Ge/SiGe MQW Photodetector through a SiGe Waveguide. ECS Transactions, 2014, 64, 761-773.	0.5	2
53	High quality SiGe waveguide platform for Ge photonics on bulk silicon substrates. , 2014, , .		0
54	Carrier lifetimes in uniaxially strained Ge micro bridges. , 2014, , .		1

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55	Process induced tensile strain of Ge on Si nanopillars by ICP-PECVD SiN stressor layers. , 2014, , .		0
56	Advances towards the demonstration of a Ge/SiGe modulator integrated on SOI. , 2014, , .		0
57	Ordered arrays of embedded Ga nanoparticles on patterned silicon substrates. Nanotechnology, 2014, 25, 205301.	2.6	20
58	Ge/SiGe quantum wells on Si(111): Growth, structural, and optical properties. Journal of Applied Physics, 2014, 116, .	2.5	14
59	Dislocation engineering in SiGe on periodic and aperiodic Si(001) templates studied by fast scanning X-ray nanodiffraction. Applied Physics Letters, 2014, 104, .	3.3	15
60	Reconstruction of crystal shapes by X-ray nanodiffraction from three-dimensional superlattices. Journal of Applied Crystallography, 2014, 47, 2030-2037.	4.5	8
61	Metastability and relaxation in tensile SiGe on Ge(001) virtual substrates. Journal of Applied Physics, 2014, 116, 113507.	2.5	10
62	Ge quantum well plasmon-enhanced quantum confined Stark effect modulator. Materials Research Society Symposia Proceedings, 2014, 1627, 1.	0.1	2
63	(Invited) Three-Dimensional Epitaxial Si _{1-x} Ge _x , Ge and SiC Crystals on Deeply Patterned Si Substrates. ECS Transactions, 2014, 64, 631-648.	0.5	14
64	(Invited) The Thermoelectric Properties of Ge/SiGe Based Superlattices: from Materials to Energy Harvesting Modules. ECS Transactions, 2014, 64, 929-937.	0.5	1
65	Thin SiGe virtual substrates for Ge heterostructures integration on silicon. Journal of Applied Physics, 2014, 115, .	2.5	28
66	Advances Toward Ge/SiGe Quantum-Well Waveguide Modulators at 1.3 μ m. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 33-39.	2.9	27
67	Recent progress in GeSi electro-absorption modulators. Science and Technology of Advanced Materials, 2014, 15, 014601.	6.1	27
68	Multilayered Ge/SiGe Material in Microfabricated Thermoelectric Modules. Journal of Electronic Materials, 2014, 43, 3838-3843.	2.2	5
69	Ultra high hole mobilities in a pure strained Ge quantum well. Thin Solid Films, 2014, 557, 329-333.	1.8	11
70	Integrated germanium optical interconnects on silicon substrates. Nature Photonics, 2014, 8, 482-488.	31.4	196
71	3D heteroepitaxy of mismatched semiconductors on silicon. Thin Solid Films, 2014, 557, 42-49.	1.8	18
72	Prospects for SiGe thermoelectric generators. Solid-State Electronics, 2014, 98, 70-74.	1.4	21

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73	Strain release management in SiGe/Si films by substrate patterning. Applied Physics Letters, 2014, 105, 242103.	3.3	3
74	Epitaxial Ge-crystal arrays for X-ray detection. Journal of Instrumentation, 2014, 9, C03019-C03019.	1.2	5
75	Ge quantum-well waveguide modulator at 1.3 μ m. Proceedings of SPIE, 2014, , .	0.8	0
76	Straining Ge bulk and nanomembranes for optoelectronic applications: a systematic numerical analysis. Semiconductor Science and Technology, 2014, 29, 095012.	2.0	15
77	Scanning X-ray strain microscopy of inhomogeneously strained Ge micro-bridges. Journal of Synchrotron Radiation, 2014, 21, 111-118.	2.4	37
78	Thermal Conductivity Measurement Methods for SiGe Thermoelectric Materials. Journal of Electronic Materials, 2013, 42, 2376-2380.	2.2	9
79	Ge/SiGe Superlattices for Thermoelectric Devices Grown by Low-Energy Plasma-Enhanced Chemical Vapor Deposition. Journal of Electronic Materials, 2013, 42, 2030-2034.	2.2	10
80	Hydrostatic strain enhancement in laterally confined SiGe nanostripes. Physical Review B, 2013, 88, .	3.2	13
81	Power Factor Characterization of Ge/SiGe Thermoelectric Superlattices at 300 \AA K. Journal of Electronic Materials, 2013, 42, 1449-1453.	2.2	7
82	Ge/SiGe superlattices for nanostructured thermoelectric modules. Thin Solid Films, 2013, 543, 153-156.	1.8	16
83	Strong quantum-confined Stark effect from light hole related direct-gap transitions in Ge quantum wells. Applied Physics Letters, 2013, 102, .	3.3	13
84	Prospects for SiGe thermoelectric generators. , 2013, , .		1
85	Design of electroabsorption modulator based on Ge/SiGe multiple quantum wells, integrated on SOI waveguides. , 2013, , .		0
86	The cross-plane thermoelectric properties of p-Ge/Si _{0.5} Ge _{0.5} superlattices. Applied Physics Letters, 2013, 103, .	3.3	47
87	Strong quantum-confined Stark effect from light hole excitonic transition in Ge quantum wells for ultra-compact optical modulator. , 2013, , .		0
88	Ge/SiGe superlattices for thermoelectric energy conversion devices. Journal of Materials Science, 2013, 48, 2829-2835.	3.7	23
89	Ge quantum well optoelectronic devices for light modulation, detection, and emission. Solid-State Electronics, 2013, 83, 92-98.	1.4	10
90	Analysis of enhanced light emission from highly strained germanium microbridges. Nature Photonics, 2013, 7, 466-472.	31.4	367

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91	Ge/SiGe quantum well optical modulator. Proceedings of SPIE, 2013, , .	0.8	1
92	The thermoelectric properties of Ge/SiGe modulation doped superlattices. Journal of Applied Physics, 2013, 113, .	2.5	65
93	Spin-polarized photoemission from SiGe heterostructures. , 2013, , .		0
94	Relaxation and recombination processes in Ge/SiGe multiple quantum wells. , 2013, , .		0
95	Controlling the polarization dynamics by strong THz fields in photoexcited germanium quantum wells. New Journal of Physics, 2013, 15, 075004.	2.9	8
96	High Extinction Ratio, Low Energy Ge Quantum Well Electro-Absorption Modulator with 23 GHz Bandwidth. ECS Transactions, 2013, 50, 387-392.	0.5	0
97	Si/SiGe Thermoelectric Generators. ECS Transactions, 2013, 50, 959-963.	0.5	1
98	Publisher's Note: Dephasing in Ge/SiGe quantum wells measured by means of coherent oscillations [Phys. Rev. B86, 201303(R) (2012)]. Physical Review B, 2013, 87, .	3.2	0
99	Substrate strain manipulation by nanostructure perimeter forces. Journal of Applied Physics, 2013, 113, 164308.	2.5	12
100	Low energy consumption and high speed germanium-based optoelectronic devices. , 2013, , .		2
101	Perfect crystals grown from imperfect interfaces. Scientific Reports, 2013, 3, 2276.	3.3	31
102	Towards low energy consumption integrated photonic circuits based on Ge/SiGe quantum wells. Nanophotonics, 2013, 2, 279-288.	6.0	5
103	Holes in germanium quantum wells: spin relaxation and temperature dynamics. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1238-1241.	0.8	0
104	Patterning-induced strain relief in single lithographic SiGe nanostructures studied by nanobeam x-ray diffraction. Nanotechnology, 2012, 23, 155702.	2.6	24
105	23 GHz Ge/SiGe multiple quantum well electro-absorption modulator. Optics Express, 2012, 20, 3219.	3.4	108
106	Quantum-confined Stark effect at $13\text{Å}^{\frac{1}{4}}\text{m}$ in Ge/Si _{0.35} Ge _{0.65} quantum-well structure. Optics Letters, 2012, 37, 3960.	3.3	29
107	Ge/SiGe heterostructures as emitters of polarized electrons. Journal of Applied Physics, 2012, 111, 063916.	2.5	15
108	Lithographically defined low dimensional SiGe nanostripes as silicon stressors. Journal of Applied Physics, 2012, 112, .	2.5	8

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109	Temperature dependence of the direct interband transitions of a Ge/SiGe multiple-quantum-well structure with Ge-rich barriers. Physical Review B, 2012, 85, .	3.2	3
110	Spin band-gap renormalization and hole spin dynamics in Ge/SiGe quantum wells. Physical Review B, 2012, 85, .	3.2	23
111	Space-Filling Arrays of Three-Dimensional Epitaxial Ge and Si _{1-x} Ge _x Crystals. , 2012, , .		0
112	Dephasing in Ge/SiGe quantum wells measured by means of coherent oscillations. Physical Review B, 2012, 86, .	3.2	3
113	Electroabsorption based on quantum-confined Stark effect from Ge/SiGe multiple quantum wells. Proceedings of SPIE, 2012, , .	0.8	0
114	Room temperature direct-gap electroluminescence in Ge/SiGe quantum well waveguides. Proceedings of SPIE, 2012, , .	0.8	0
115	Three dimensional heteroepitaxy: A new path for monolithically integrating mismatched materials with silicon. , 2012, , .		1
116	Ultra-fast inter-subband relaxation and non-thermal carrier distribution in Ge/SiGe quantum wells. , 2012, , .		0
117	Scaling Hetero-Epitaxy from Layers to Three-Dimensional Crystals. Science, 2012, 335, 1330-1334.	12.6	149
118	Photoluminescence decay of direct and indirect transitions in Ge/SiGe multiple quantum wells. Journal of Applied Physics, 2012, 111, 013501.	2.5	22
119	High speed electro-absorption modulator based on quantum-confined stark effect from Ge/SiGe multiple quantum wells. , 2012, , .		1
120	1.55-µm direct bandgap electroluminescence from strained n-Ge quantum wells grown on Si substrates. Applied Physics Letters, 2012, 101, .	3.3	19
121	Measurement of room temperature electroluminescence from Ge quantum well waveguides. , 2012, , .		0
122	Direct-Gap Gain and Optical Absorption in Germanium Correlated to the Density of Photoexcited Carriers, Doping, and Strain. Physical Review Letters, 2012, 109, 057402.	7.8	84
123	Ge quantum well electro-absorption modulator with 23 GHz bandwidth. , 2012, , .		1
124	Si/SiGe nanoscale engineered thermoelectric materials for energy harvesting. , 2012, , .		0
125	Homogeneity of Ge-rich nanostructures as characterized by chemical etching and transmission electron microscopy. Nanotechnology, 2012, 23, 045302.	2.6	11
126	Photoreflectance study of direct-gap interband transitions in Ge/SiGe multiple quantum wells with Ge-rich barriers. Applied Physics Letters, 2012, 100, 041905.	3.3	3

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127	Above-room-temperature photoluminescence from a strain-compensated Ge/Si _{0.15} Ge _{0.85} multiple-quantum-well structure. Applied Physics Letters, 2012, 100, .	3.3	18
128	Hole system heating by ultrafast interband energy transfer in optically excited Ge/SiGe quantum wells. Physical Review B, 2012, 85, .	3.2	3
129	Tensile strained Ge quantum wells on Si substrate: Post-growth annealing versus low temperature re-growth. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 696-699.	3.5	5
130	Low power consumption Ge/SiGe Quantum well optical modulator. , 2012, , .		0
131	Ultrafast Electron-Hole Scattering Monitored by Hole Cooling in Optically Excited Germanium Quantum Wells. , 2012, , .		0
132	Low power consumption Ge/SiGe quantum well optical modulator. , 2012, , .		0
133	30 GHz Ge/SiGe multiple quantum well photodiode. , 2011, , .		0
134	10-Gb/s Ge/SiGe Multiple Quantum-Well Waveguide Photodetector. IEEE Photonics Technology Letters, 2011, 23, 1430-1432.	2.5	24
135	Photoluminescence and ultrafast intersubband relaxation in Ge/SiGe multiple quantum wells. Physical Review B, 2011, 84, .	3.2	6
136	Room temperature photoluminescence of Ge multiple quantum wells with Ge-rich barriers. Applied Physics Letters, 2011, 98, 031106.	3.3	48
137	Ge/SiGe multiple quantum well photodiode with 30 GHz bandwidth. Applied Physics Letters, 2011, 98, .	3.3	38
138	Polarization dependence of quantum-confined Stark effect in Ge/SiGe quantum well planar waveguides. Optics Letters, 2011, 36, 1794.	3.3	31
139	Room temperature direct gap electroluminescence from Ge/Si _{0.15} Ge _{0.85} multiple quantum well waveguide. Applied Physics Letters, 2011, 99, .	3.3	37
140	Giant AC Stark shift in Germanium. , 2011, , .		0
141	Optical spin injection in SiGe heterostructures. Proceedings of SPIE, 2011, , .	0.8	2
142	Plasma Composition by Mass Spectrometry in a Ar-SiH ₄ -H ₂ LEPECVD Process During nc-Si Deposition. Plasma Chemistry and Plasma Processing, 2011, 31, 157-174.	2.4	5
143	Ultrafast transient gain in Ge/SiGe quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1109-1112.	0.8	2
144	Quantum-confined direct-gap transitions in tensile-strained Ge/SiGe multiple quantum wells. Applied Physics Letters, 2011, 99, 031907.	3.3	18

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145	Giant dynamical Stark shift in germanium quantum wells. Applied Physics Letters, 2011, 98, .	3.3	22
146	Transient optical gain and carrier dynamics in Ge/SiGe quantum wells. Proceedings of SPIE, 2010, , .	0.8	2
147	Photoluminescence Study of Low Thermal Budget III-V Nanostructures on Silicon by Droplet Epitaxy. Nanoscale Research Letters, 2010, 5, 1650-1653.	5.7	6
148	Ordered Arrays of SiGe Islands from Low-Energy PECVD. Nanoscale Research Letters, 2010, 5, 1917-1920.	5.7	4
149	Electrical and structural properties of β -type nanocrystalline silicon grown by LEPECVD for photovoltaic applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 712-715.	0.8	1
150	Raman efficiency in SiGe alloys. Physical Review B, 2010, 82, .	3.2	23
151	Comparison of ultrafast carrier thermalization in $\text{Ga}_{1-x}\text{Si}_x\text{Ge}$ quantum wells. Physical Review B, 2010, 81, .	3.2	19
152	Low Thermal Budget Fabrication of III-V Quantum Nanostructures on Si Substrates. Journal of Physics: Conference Series, 2010, 245, 012078.	0.4	0
153	Determination of Raman Efficiency in SiGe Alloys. , 2010, , .		0
154	Ge-rich islands grown on patterned Si substrates by low-energy plasma-enhanced chemical vapour deposition. Nanotechnology, 2010, 21, 475302.	2.6	22
155	Quantum-confined Stark effect measurements in Ge/SiGe quantum-well structures. Optics Letters, 2010, 35, 2913.	3.3	61
156	Si/SiGe quantum cascade superlattice designs for terahertz emission. Journal of Applied Physics, 2010, 107, 053109.	2.5	21
157	Ge/SiGe quantum wells structures for optical modulation. , 2010, , .		0
158	Ultrafast Optical Response and Transient Population Inversion of Photoexcited Ge/SiGe Quantum Wells. , 2010, , .		0
159	Crystallinity and microstructure in Si films grown by plasma-enhanced chemical vapor deposition: A simple atomic-scale model validated by experiments. Applied Physics Letters, 2009, 94, 051904.	3.3	16
160	Ultrafast nonlinear optical response of photoexcited Ge/SiGe quantum wells: Evidence for a femtosecond transient population inversion. Physical Review B, 2009, 79, .	3.2	73
161	Ultralow dark current Ge/Si(100) photodiodes with low thermal budget. Applied Physics Letters, 2009, 94, .	3.3	89
162	8 Gb/s 0.5 V integrated Ge-on-SOI photodetector. , 2009, , .		0

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163	Langmuir probe plasma parameters and kinetic rates in a Ar-SiH ₄ -H ₂ plasma during nc-Si films deposition for photovoltaic applications. Journal Physics D: Applied Physics, 2009, 42, 225202.	2.8	6
164	Si/SiGe Bound-to-Continuum Quantum Cascade Emitters. ECS Transactions, 2009, 16, 865-874.	0.5	4
165	Tuning by means of laser annealing of electronic and structural properties of nc-Si/a-Si:H. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 31-33.	3.5	3
166	Positron annihilation studies of defects in Si _x Ge _{1-x} /SOI heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2304-2306.	0.8	1
167	Impact of misfit dislocations on wavefront distortion in Si/SiGe/Si optical waveguides. Optics Communications, 2009, 282, 4716-4722.	2.1	0
168	Direct gap related optical transitions in Ge/SiGe quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 972-975.	2.7	21
169	Phenomenological model of nanocrystalline silicon film formation by plasma-enhanced chemical vapor deposition. Optoelectronics, Instrumentation and Data Processing, 2009, 45, 322-327.	0.6	0
170	Polarization-dependent absorption in Ge/SiGe multiple quantum wells: Theory and experiment. Physical Review B, 2009, 79, .	3.2	39
171	Vertical arrays of nanofluidic channels fabricated without nanolithography. Lab on A Chip, 2009, 9, 1556.	6.0	19
172	Fabrication of high efficiency III-V quantum nanostructures at low thermal budget on Si. Applied Physics Letters, 2009, 95, 241102.	3.3	25
173	Plasma Composition and Kinetic Reaction Rates in a LEPECVD Ar-SiH ₄ -H ₂ Plasma During nc-Si Films Deposition for Photovoltaic Applications. ECS Transactions, 2009, 25, 1065-1072.	0.5	2
174	Threshold ionization mass spectrometry in the presence of excited silane radicals. Journal Physics D: Applied Physics, 2009, 42, 072003.	2.8	6
175	Fabrication of GaAs quantum dots by droplet epitaxy on Si/Ge virtual substrate. IOP Conference Series: Materials Science and Engineering, 2009, 6, 012009.	0.6	3
176	An Investigation of the Gas Phase and Surface Chemistry Active During the PECVD of nc-Silicon: A Detailed Model of the Gas Phase and Surface Chemistry. ECS Transactions, 2009, 25, 107-114.	0.5	2
177	Patterning of Si substrates for Ge/Si(001) islands grown by low-energy plasma enhanced CVD. , 2009, , .		3
178	Raman Spectroscopy for the Analysis of Temperature-Dependent Plastic Relaxation in SiGe Layers. Acta Physica Polonica A, 2009, 116, 78-80.	0.5	1
179	Raman spectroscopy determination of composition and strain in heterostructures. Materials Science in Semiconductor Processing, 2008, 11, 279-284.	4.0	78
180	Ge/Si (100) heterojunction photodiodes fabricated from material grown by low-energy plasma-enhanced chemical vapour deposition. Thin Solid Films, 2008, 517, 380-382.	1.8	6

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181	Hydrogenated Nanocrystalline Silicon Investigated by Conductive Atomic Force Microscopy. Springer Proceedings in Physics, 2008, , 301-304.	0.2	0
182	An experimental and theoretical investigation of a magnetically confined dc plasma discharge. Journal of Applied Physics, 2008, 104, .	2.5	20
183	SiGe/Si quantum cascade structures deposited by low-energy plasma-enhanced CVD. , 2008, , .		2
184	Optical transitions in Ge/SiGe multiple quantum wells with Ge-rich barriers. Physical Review B, 2008, 78, .	3.2	73
185	High speed Ge photodetector integrated on silicon-on-insulator operating at very low bias voltage. , 2008, , .		0
186	Ge/SiGe multiple quantum wells for optical applications. , 2008, , .		2
187	SiGe wet chemical etchants with high compositional selectivity and low strain sensitivity. Semiconductor Science and Technology, 2008, 23, 085021.	2.0	23
188	Gate-controlled rectifying barrier in a two-dimensional hole gas. Nanotechnology, 2008, 19, 335201.	2.6	0
189	Phonon strain shift coefficients in Si $_{1-x}$ Ge $_x$ alloys. Journal of Applied Physics, 2008, 103, .	2.5	63
190	Structural Characterization of Nanocrystalline Silicon Layers Grown by LEPECVD for Optoelectronic Applications. Springer Proceedings in Physics, 2008, , 305-308.	0.2	3
191	MEASUREMENT OF THE LIFETIME OF PHOTO-GENERATED FREE CARRIERS IN SiGe WAVEGUIDES. Journal of Nonlinear Optical Physics and Materials, 2007, 16, 207-216.	1.8	0
192	Effective mass measurement: the influence of hole band nonparabolicity in SiGe/Ge quantum wells. Semiconductor Science and Technology, 2007, 22, S191-S194.	2.0	7
193	Measurement of carrier lifetime and interface recombination velocity in Si ϵ -Ge waveguides. Applied Physics Letters, 2007, 91, .	3.3	13
194	Defect analysis of hydrogenated nanocrystalline Si thin films. Physica B: Condensed Matter, 2007, 401-402, 519-522.	2.7	7
195	Photocurrent and transmission spectroscopy of direct-gap interband transitions in Ge ϵ -SiGe quantum wells. Applied Physics Letters, 2006, 89, 262119.	3.3	44
196	Hole band nonparabolicity and effective mass measurement in p-SiGe/Ge heterostructures. Materials Science in Semiconductor Processing, 2006, 9, 777-780.	4.0	3
197	Strain-induced shift of phonon modes in alloys. Materials Science in Semiconductor Processing, 2006, 9, 541-545.	4.0	26
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